Claims:

1. (Currently Amended) A Rigid Ring Amino Acid having the [general] chemical structure

$$H_{2}N - \left(CH_{2}\right) - \left(CH_{3}\right) - \left(CH_{3$$

wherein R is cyclohexyl and having the parameters a, b, c, and d wherein the parameters a and b may be chosen to be 0 or 1 and wherein the parameters c and d are chosen to be [0 or] n where n is [a positive] \underline{an} integer and further chosen such that for any integer value of c = n where n is $\underline{greater}$ than \underline{zero} $[non-\underline{zero}]$ then d = 0 and for any integer value of d = n where n is $\underline{greater}$ \underline{than} \underline{zero} $[non-\underline{zero}]$ then c = 0 and wherein the Effective Methylene Length of the Rigid Ring Amino Acid is $\underline{greater}$ than $\underline{8}$ [5] and less than 18 and the Carbon Number of the Rigid Ring Amino Acid is $\underline{greater}$ than $\underline{11}$ [10] and less than 25.

2. (Currently amended) [A cyclohexyl based Hindered Rigid Ring Amino Acid with] A Rigid Ring Amino Acid having the chemical structure

$$H_{2}N - \left(CH_{2}\right) - \left(CH_{3}\right) - \left(CH_{3}\right) - \left(CH_{3}\right) - \left(CH_{3}\right) - \left(CH_{2}\right) - \left(CH_{2}\right) - \left(CH_{3}\right) - \left(CH_{3$$

wherein R is cyclohexyl and having the parameters a, b, c, and d wherein the parameters a or b or both are 1 and wherein the parameters c and d are chosen to be n where n is an integer and further chosen such that for any integer value of c = n where n is greater than zero then d = 0 and for any integer value of d = n where n is greater than zero then c = 0 and wherein the Rigid Ring Amino Acid has an Effective Methylene Length greater than 4 and less than 18 and a Carbon Number greater than 9 and less than 25.

- 3. (Withdrawn) A polyamide comprising at least one monomer selected from the group consisting of Rigid Ring Amino Acids with an Effective Methylene Length greater than 5 and less than 27 and a Carbon Number greater than 11 and less than 34.
- 4. (Withdrawn) The polyamide of claim 3 wherein at least one Rigid Ring Amino Acid has an Effective Methylene Length greater than 8 and less than 18.
- 5. (Withdrawn) The polyamide of Claim 4 further including at least one cyclohexyl based Rigid Ring Amino Acid having an Effective Methylene Length greater than 8 and less than 18.
- 6. (Withdrawn) The polyamide of Claim 4 further including at least one Hindered Rigid Ring Amino Acid.
- 7. (Withdrawn) The polyamide of Claim 4 further including at least one second monomer selected from the group consisting of 6-aminohexanoic acid, 7-aminoheptanoic acid, 8-aminooctanoic

- acid, 9-aminononoic acid, 10-aminodecanoic acid, 11-aminoundecanoic acid and 12-aminododecanoic acid.
- 8. (Withdrawn) The polyamide of Claim 5 further including at least one Asymmetric Rigid Ring Amino Acid Pair.
- 9. (Withdrawn) The polyamide of claim 8 wherein each of at least one Asymmetric Rigid Ring Amino Acid Pair have the same Effective Methylene Length.
- 10. (Withdrawn) The polyamide of Claim 9 wherein at least one Asymmetric Rigid Ring Amino Acid Pair consists of Hindered Rigid Ring Amino Acids.
- 11. (Withdrawn) The polyamide of claim 7 further including 11-aminoundecanoic acid.
- 12. (Withdrawn) The polyamide of claim 8 further including 11-aminoundecanoic acid.
- 13. (Withdrawn) The polyamide of claim 7 further including 12-aminododecanoic acid.
- 14. (Withdrawn) The polyamide of claim 8 further including 12-aminododecanoic acid.
- 15. (Withdrawn) A polyamide comprising at least one monomer selected from the group consisting of cyclohexyl based Hindered Rigid Ring Amino Acids with an Effective Methylene Length greater than 4 and less than 18.

- 16. (Withdrawn) The polyamide of claim 15 further including 6-aminohexanoic acid
- 17. (Withdrawn) The polyamide of claim 16 wherein at least one cyclohexyl based Hindered Rigid Ring Amino Acid has an Effective Methylene Length of 5.
- 18. (Withdrawn) The polyamide of claim 17 further including at least one Asymmetric Rigid Ring Amino Acid Pair each of which has an Effective Methylene Length of 5.
- 19. (Withdrawn) The polyamide of claim 17 further including at least one cyclohexyl based Rigid Ring Amino Acid with an Effective Methylene Length of 12.
- 20. (Withdrawn) The Rigid Ring Amino Acid of claim 1 wherein the Effective Methylene Length is greater than 8 and less than 18.
- 21. (Currently Amended) The Rigid Ring Amino Acid of claim $\underline{1}$ [2] wherein the parameter a or b or both a and b are 1.
- 22. (New claim dependent to claim 1) The Rigid Ring Amino Acid of claim 1 with an Effective Methylene Length of 12.
- 23. (New claim dependent to claim 2) The Rigid Ring Amino Acid of claim 2 with an Effective Methylene Length of 5 and a Carbon Number of 10.